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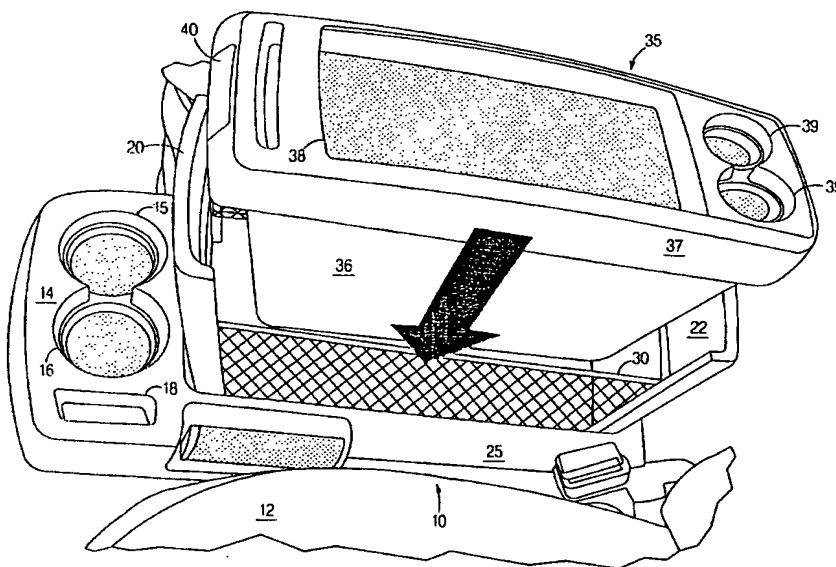
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[Continued on next page]

(54) Title: FLOOR CONSOLE



(57) Abstract: A low profile floor console (10) for a vehicle includes a pair of end walls (20, 22). In a lowered position, the console permits pass through between two spaced apart vehicle seats (12, 13). When raised, fabric or netting attached, together with the end walls (20, 22) define a storage area. In the preferred embodiment, an add-on module (35) fits over the raised end walls (20, 22) to provide a rigid storage area, and additional functionality, such as a tray (38), a power port (74), cup holders (39), change bins, and the like. The lid (37) of the module (35) may be configured for sliding or pivotal movement to allow access to the interior thereof. Also in the preferred embodiment, the floor console (10) is constructed to trim out a parking brake (25) assembly.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/28922

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B60R11/00 B60R7/00 B60R7/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 04, 31 March 1998 (1998-03-31) -& JP 09 328039 A (KANTO AUTO WORKS LTD), 22 December 1997 (1997-12-22)	1,2, 8-10,15
Y	abstract; figures	2
Y	----- US 2001/020631 A1 (SPYKERMAN DAVID J ET AL) 13 September 2001 (2001-09-13)	2
A	paragraph [0033] - paragraph [0050]; figures	1
A	----- DE 43 40 675 A (BAYERISCHE MOTOREN WERKE AG) 1 June 1995 (1995-06-01) column 2, line 60 - column 4, line 51; figures	1
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

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# INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 2002/089203 A1 (FLOWERDAY CRAIG D ET AL) 11 July 2002 (2002-07-11)  paragraph [0014] - paragraph [0028];  figures</p> <p>-----</p>	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 03/28922

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1, 2, 8, 9, 10, 15

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 2, 8, 9, 10, 15

JP9328039A, referred in the following as D1 discloses (see abstract and figures) a floor console for use in a vehicle, the floor console comprising:  
 a base 5 coupled to the vehicle 2;  
 a first panel 6 and a second panel 9 coupled to the base 5 and movable between a lowered position and a raised position to provide additional storage capabilities;  
 a first flexible member 16 and a second flexible member 16 coupled to the first panel 6 and the second panel 9, wherein a storage area is provided by the first 6 and second panels 9, the first and second flexible members 16, and the base 5 when the first 6 and second 9 panels are in the raised position;  
 a module 11 configured to be removably retained by being disposed in the storage area, wherein the floor console provides a low profile condition when the first 6 and second 9 panels are in the lowered position and provides an additional storage area condition when the first 6 and second 9 panels are in the upright position.  
 D1 discloses therefore the features of independent claim 1. D1 discloses also the features of dependent claims:  
 8 (see D1, fig. 2, 3, 4), actually that each of the first and second flexible members 16 comprise netting;  
 9 (see D1, fig. 2, 3, 4), actually that the netting is coupled to a rigid frame 8a;  
 10 (see D1, figures), actually that the first and second panels 16 are configured for pivotal movement and provide side walls when in the upright position;  
 15 (see D1, figure 2), actually that the first panel 6 is disposed towards the front of the vehicle, the second panel 9 is disposed towards the rear of the vehicle.

Invention 1

The additional features of dependent claim 2 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the first and second panels are spring biased to the raised position or the lowered position.

From these STF the objective problem to be solved by the 1st invention can be construed as: how to facilitate opening or closing of the panels.

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2. claim: first alternative of claim 3

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

The additional features of the first alternative of dependent claim 3 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the base is located between a pair of spaced apart seats. From these STF the objective problem to be solved by the 2nd invention can be construed as: how to use the console as a service facility for front passengers.

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## 3. claim: second alternative of claim 3

The additional features of the second alternative of dependent claim 3 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the base is located in a cargo area of the vehicle. From these STF the objective problem to be solved by the 3rd invention can be construed as: how to use the console for luggage.

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## 4. claim: the three first alternatives of claim 4

The additional features of the three first alternatives of dependent claim 4 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the base comprises a tray or a removable tray or one or more cup holders. From these STF the objective problem to be solved by the 4th invention can be construed as: how to use the base as a service surface.

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## 5. claim: the fourth alternative of claim 4

The additional features of the fourth alternative of dependent claim 4 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the base comprises a power port. From these STF the objective problem to be solved by the 5th invention can be construed as: how to provide a power facility.

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## 6. claim: the fifth alternative of claim 4

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

The additional features of the fifth alternative of dependent claim 4 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the base comprises a parking brake.  
From these STF the objective problem to be solved by the 6th invention can be construed as: how to integrate the base in the vehicle.

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## 7. claims: 5, 6

The additional features of the three alternatives of dependent claim 5 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module comprises a tray or a removable tray or one or more cup holders.  
From these STF the objective problem to be solved by the 7th invention can be construed as: how to use the module as a service surface.

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## 8. claim: 7

The additional features of dependent claim 7 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): surfaces on the first and second panels provide a tray when in the lowered position.  
From these STF the objective problem to be solved by the 8th invention can be construed as: how to provide an extra service surface in the lowered position of the console.

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## 9. claim: 11

The additional features of dependent claim 11 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is configured to be supported by the first and second panels.  
From these STF the objective problem to be solved by the 9th invention can be construed as: how to provide an higher position of use for the module.

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## 10. claim: 12



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

The additional features of dependent claim 12 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): a secondary storage space is provided between walls of the module and the flexible or the flexible member.  
From these STF the objective problem to be solved by the 10th invention can be construed as: how to provide multiple storage positions.

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## 11. claim: 13

The additional features of dependent claim 13 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module comprises a sliding top portion movable to expose an internal storage space of the module.  
From these STF the objective problem to be solved by the 11th invention can be construed as: how to close the module.

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## 12. claim: the first alternative of claim 14

The additional features of the first alternative of dependent claim 14 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is a cooler.  
From these STF the objective problem to be solved by the 12th invention can be construed as: how to find an alternative to the module of the prior art.

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## 13. claim: second alternative of claim 14

The additional features of the second alternative of dependent claim 14 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is a children's module.  
From these STF the objective problem to be solved by the 13th invention can be construed as: how to find an alternative to the module of the prior art.

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## 14. claim: third alternative of claim 14

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

The additional features of the third alternative of dependent claim 14 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is a baby's module.  
From these STF the objective problem to be solved by the 14th invention can be construed as: how to find an alternative to the module of the prior art.

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## 15. claim: the fourth alternative of claim 14

The additional features of the fourth alternative of dependent claim 14 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is an infotainment module.  
From these STF the objective problem to be solved by the 15th invention can be construed as: how to find an alternative to the module of the prior art.

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## 16. claim: the fifth alternative of claim 14

The additional features of the fifth alternative of dependent claim 14 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the module is a work module.  
From these STF the objective problem to be solved by the 16th invention can be construed as: how to find an alternative to the module of the prior art.

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## 17. claims: 16, 17

The additional features of dependent claim 16 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the floor console further comprises a second module interchangeable with the first module to be configured to be removably retained by being at least partially disposed in the storage area.  
Among the additional features of dependent claim 17 that are not disclosed by D1 the following can be seen to make the contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the floor console further comprises a second module configured to be removably retained by being at least partially disposed in the second storage area; wherein the first and second modules are interchangeable.  
From these STF the objective problem to be solved by the 17th invention can be construed as: how to improve the modularity of the console.

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

18. claim: 18

The additional features of dependent claim 18 are not disclosed by D1 and therefore can be seen to make the following contribution over this prior art (Special Technical Features (STF), (Rule 13.2 PCT)): the floor console further comprises a plurality of storage components adaptable for reconfigurable use with the base or the module.

From these STF the objective problem to be solved by the 18th invention can be construed as: how to reduce the number of storage components.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/28922

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 09328039	A	22-12-1997	NONE	
US 2001020631	A1	13-09-2001	US 6253943 B1	03-07-2001
			US 6015071 A	18-01-2000
			US 2003071039 A1	17-04-2003
			EP 0864466 A2	16-09-1998
DE 4340675	A	01-06-1995	DE 4340675 A1	01-06-1995
US 2002089203	A1	11-07-2002	NONE	